

Lectio Divina and Neuroscience: Preliminary Notes

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In the context of revival of interest in meditative forms of prayer, the author examines their importance and discusses it from the combined perspective of spirituality and neuroscience. He focuses in particular on the ancient meditative method associated with the reading of sacred texts known as Lectio Divina and highlights the continuous significance of this spiritual exercise. Consequently, he discusses its effectiveness while taking into consideration the findings of the brain research that examined the correlation between spiritual activities and neuroplasticity. In addition, he points to the positive effects of the said spiritual activities in terms of psychological experience.

1 Introduction

A growing body of research in the field of neurosciences and cognitive sciences shows how human activities alter human brain. In this paper, we will outline how research into reading and meditation can contribute to a more detailed understanding of what is happening in our brains during their practice. Based on the research findings we would like to stress the importance of these activities in the spiritual practice of a believer, with a specific focus on a spiritual exercise of *Lectio Divina*. It is a traditional form of spiritual exercise and it holds a rightful place in the development of personal spirituality of a believer. This paper will focus on the spiritual and theological context of Christian faith.

What we witness today in the West is a growing interest in meditative form of prayer, concentration or other forms of enstasis. Perhaps, it is a response to living in “fast times”. People want instant results and gratifications and that often results in insecurities, stress and discomfort brought about by constantly pushing the boundaries of our plans, desires and limits that are determined by our own natural bio-psychological boundaries. We have also noticed a growing interest in literature promoting the way of thinking that accentuates peace, slowing down and focus on the present moment [1]. We believe that the analysis of meditation activities is relevant and can attract interest in further study of the importance of spiritual exercises in daily life of contemporary people.

Having analyzed reading and meditation from the perspective of neuroscience, the author shifts his focus to possible applications of some of these findings to contemplative reading that takes into account one’s theological framework (person’s faith) as well as his/her biological nature.



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2 The Historical Roots of Lectio Divina

The contemplative reading has its roots in the Patristic and Monastic tradition of the East in the early Middle Ages. Private prayer that included reading, meditation, and contemplation became an essential part of the daily praying routine of the monks in cloisters. Reading and meditative pondering over the text (mostly biblical) prepare monks for a prayer that leads to contemplation. These individual phases were seen as a process during which the spirit and the heart of a monk immerse into the mysteries of faith. This immersion leads us deeper into God's word. It also has a practical effect on understanding oneself and one's life situations. In this fashion, monks often read texts of the Church Fathers and other monastic literature.

Lectio Divina is one of the oldest techniques of meditative reading. In the fifth-century West, Lectio Divina was practiced especially in the Benedictine and Carthusian tradition. In its traditional form, this method is attributed to Saint Benedict, who found inspiration in the Patristic tradition. In this regard, there is a plethora of similarities between St. Benedict and St. Basil. In his Rules, Saint Benedict gives importance to obedience (*Regula Benedicti*, Prologue 2; 5, 1–2) and community stability (Lat. *stabilitas loci*) (*Regula Benedicti* 7, 78), which are interdependent. In the similar vein, St. Basil believed that countless human sufferings come from not being able to remain in silence in one's place. *Stabilitas* and *conversio* set the framework for the practice of Lectio Divina, too (Altrichter 2013, 69–70).

Lectio Divina was an essential feature of St. Benedict's spirituality to which he wanted the monks to dedicate three hours a day (*Regula Benedicti* 48). "Idleness in the enemy of the soul; and therefore the brethren ought to be employed in manual labor at certain times, at others, in devout reading. Hence, we believe that the time for each will be properly ordered by the following arrangement..." (*Regula Benedicti* 48, 1–2). During the Lenten season, another hour was added to the reading time (*Regula Benedicti* 48, 14). For St. Benedict, the balance between praying and manual work was very important.

Lectio should always be accompanied by *silence* (*Regula Benedicti* 48, 18) to facilitate the vigilant listening to God. If the monk does not practice it, he could run the risk of never encountering the One that he so wholeheartedly seeks. Such an intense prayer asks for attention and concentration. It is not just some sort of informative reading. Through the practice of *lectio*, the monk seeks answers to the existential questions of his very life.

In the Middle Ages, books were not readily available to everybody and the reading was considered a rather difficult activity. *Lectio*, therefore, was sometimes substituted with listening to texts that were read aloud by others. Repeated reading and listening helped monks memorize the Holy Scripture and then reflect on its meaning whilst doing manual labor during the day. *Lectio* thus involved *reading* and *reflection* [2]. Initially, it was not the kind of imaginative reflection introduced in the 14th century by *devotio moderna* or the kind we can find in Jesuit spirituality or in *mantra* meditations. The practice of *lectio* opened with the slow, deliberative reading and memorizing of the text, which allowed the sacred words of the Bible to enter the monk's heart so he could ponder over them during the day (Stewart 1998, 36).

A detailed description of this spiritual exercise is provided by the Carthusian writer and the prior of the Grande Chartreuse monastery from 1174–80, Guigo II. What we see here, however, is more of a meditative approach to the biblical text. His *Scala Paradisi* is written in a form of a letter, sometimes before 1150, and addressed to his friend Gervase, a prior at Mont-Dieu. In his letter, Guigo II described four stages of the spiritual life that lead to God: "When I was at hard at work one day, thinking on the spiritual work needful for God's servants, four such spiritual works came to my mind, these being: reading; meditation; prayer; contemplation. This is the ladder for those in cloisters, and for others in the world who are God's Lovers, by means of which they can climb from earth to heaven." (*Scala Paradisi*, chap. 1).

The teaching of *Scala Paradisi* became an integral part of the monastic tradition in the West. It is also found in the treatise known as *The Cloud of Unknowing* written by the anonymous English author in the second half of the 14th century. He discusses the teachings of Guigo II as the foundation for his own elaboration developing apophatic tradition. Just as Guigo II, the anonymous author too puts emphasis on *spiritual reading* (Lat. *lectio*), *meditation* (Lat. *meditatio*), and *prayer* (Lat. *oratio*) as the essential stages that enable the person to *contemplate* (Dojčár 2017, 41–42). He writes: "...the beginners and profifiers – thinking may not goodly be gotten, without reading or hearing coming first" (*The Cloud of Unknowing* 1982, 103).

Lectio coupled with meditation is anchored firmly in the history of Christian spirituality. It has enjoyed something of a renaissance since the late 19th century and has become a standard element in the monastic formation and the core of spiritual life. The resurgence of this spiritual tradition is

linked to the positive effects of this form of prayer described in *Scala Paradisi*: “Contemplation is the lifting up of the heart to God tasting somewhat of the heavenly sweetness and savor. Reading seeks, meditation finds, prayer asks, contemplation feels. That is to say, ‘Seek and you shall find: knock and the door will be opened for you’ (Matt 7:7). Seek through reading, and you will find holy meditation in your thinking; and knock through praying, and the doors shall be opened to you to enter through heavenly contemplation to feel what you desire. Reading puts as if it were whole food into your mouth; meditation chews it and breaks it down; prayer finds its savor; contemplation is the sweetness that so delights and strengthens.” (*Scala Paradisi*, chap. 2).

The question arises: What is it about meditative prayer that has enabled it to survive throughout the centuries (and even regain momentum in the spiritual practice of many Christians today) despite the many cultural and historical transformations in our society? Why was it not enough for the believers to be satisfied with the liturgical dimension of communal celebration or recitation of prayers?

Well, it is because of the positive effects that this practice has on the spiritual life of believers. Additionally, recent findings in the fields of neurosciences and cognitive sciences showed some beneficial effect of reading and meditation on our brain on a neuronal level, which then manifests itself in the way we behave and experience our life. The benefits of this form of spiritual activity were intuitively discovered centuries ago and were firmly anchored in the daily spiritual life.

3 Neuroplasticity and Reading

We do know today that the brain is not a biologically static organ. It changes throughout our lifetime. This discovery has changed our perception of the link between our brain activity and its external manifestations. It was long assumed that brain cells – *neurons* – are the essential components of the brain that are responsible for our consciousness and various other processes and that their number does not change after a certain point in a person’s life, but it indeed decreases (Zaviš 2011, 161). However, later researches have shown that synapses too play an extremely important role. A synapse is basically a junction at which neurons communicate with one another. While neurons remain the same, the synaptic connections constantly change – they are formed, they persist, and they die off. Only a fraction of synaptic connections is determined entirely by heredity. The other connections are formed based on information from the external environment through learning or experience in the broadest sense of the word (Koukolík 2014, 27–28).

Changes in our brain mostly involve the constant formation or elimination of synaptic connections between neurons. Within the bounds that are determined genetically, neurons can extend and branch out their protrusions in a response to internal and external stimuli and thus build new contact points – *synapses* – with other neurons. Interestingly, the research showed that these changes can occur within tens of seconds. František Koukolík says: “If you remember this narration and you are able to recall it and use it properly, it is because your brain had formed hundreds of millions of new synapses, a new neural network correctly connected to the old ones.” (Koukolík 2014, 33).

This phenomenon is known as *neuroplasticity* or *brain plasticity* that is most active in small children and adolescents, but it is not lost in adulthood or old age either. The brain plasticity is the basis for learning and memory, emotional life and all other brain functions. In our lives, we are constantly thrown into changing situations and interpersonal experiences that form our Self. The same can be said about working on a spiritual level, since we specifically engage our thinking and that affect our brain in terms of plasticity.

It has been proven that regular repetition of certain activities and active involvement of our mind has a positive impact on synaptic connections that are not only constantly formed but also reinforced by this repeated activity. This interrelates to our memory. One of the activities that have a positive impact on the formation of synapses is reading. However, this

is not a novel discovery. In late 1990s, Susan A. Greenfield published a study in which she claimed that the quantity of neurons is not as important as the number of synaptic connections that are formed between them. The connections are formed through brain stimulation through various external stimuli that include reading and listening (Greenfield 1998, 122–123).

It is not only the growing number of synaptic connections that is essential in order to acquire some information that can influence our actions. It is also the reinforcement of these connections and this is related to the frequency with which certain activity is performed (in our instance it is a reading of a story). This has a positive impact on the process of remembering but also on the formation of a desired habit, attitude, or way of thinking.

In his book *The Wisdom of Psychopaths*, Kevin Dutton discusses reinforcement of social behavior. He refers to a study of Jeffrey Zacks (Zacks *et al.* 2009, 989–999). Zacks and his co-workers read stories to a group of volunteers while monitoring their brain activity using fMRI. They found out that goal changes were associated with increased activity in regions of the prefrontal cortex that is activated in situations that require a conscientious and empathic attitude. In other words, whenever we read a story, we engage. We mentally imagine every new situation, event or character that we encounter while reading a story or listening to it. We trigger our imagination that plays a crucial role in this process. In a figurative sense, reading books carves into our brain new neural connections that head towards the old cortical records altering the way in which we perceive the world. At the same time, we become more attentive and empathic towards the inner lives of others. However, this does not occur with every form of communication media. Reading books enables us to look at the world that surrounds us in a unique way that we simply cannot do with immersion in the fast-changing virtual world (Dutton 2018, 175–176).

Printed texts facilitate the creation of a concrete cognitive or mental map of that text. Duchoňová (2015, 28–29) refers to numerous studies revealing that reading a hard copy activates only a small part of our brain, which shows deep concentration. The Web, on the other hand, scatters our attention. Reading from a piece of paper activates memory and visual cognition. In a digital world, our brain does not remain focused, we get often distracted by other information. A certain British study, considering the degree of comprehension and remembering exhibited by readers when working with a hard

copy or a digital text, showed that the students reading the material in digital form concentrated more on remembering than knowing. On the other hand, the students who were reading a hard copy of the material concentrated equally on remembering and knowing. The researchers suggested that the latter group of students learned the presented material faster and more accurately. This confirms the differences in cognitive processing and remembering of information acquired from a printed and a digital source.

There seems to be a difference in reading printed text and reading on the Internet. Reading online seems to be superficial, we tend to skim through the text and select information. Our brain is overwhelmed by the volume of information and cannot process the overload. Surely, reading online has its benefits, but only when we approach it with “slowness”. This plays a crucial role in reading. We acquire more knowledge and ideas from a slow reading ten pages than from twenty pages that we have read quickly. We live in times of rapid changes when speed reading has become a double-edged sword and might not be of any benefit after all. Reading is a bridge to thinking and as such it has become one of the essential competencies in human life (Haluzová 2015, 24–25).

German neuroscientist Manfred Spitzer presented even more radical take on the problem associated with a dramatic increase in the use of modern digital technology in his book *Digitale Demenz* [Digital Dementia]. He draws on researches that confirm that consumption of audio-visual media has twice the negative impact on language development of a small child in comparison to obvious positive effects of reading fairytales and stories. In other words, watching a story on TV or DVD is worse than listening to another person reading that story. Daily story reading has a positive effect on language development, whereas watching TV in early childhood has clearly detrimental effect on child’s cognitive abilities, especially when reading and listening to stories had been replaced by watching TV before the child reached the age of three. Decline in cognitive functions in children involved problems with concentration, reading ability, understanding spoken language and mathematical skills (Spitzer 2012, 143–145).

Reading positively triggers our imagination and that strengthen the neural connections. Consequently, it reinforces the process of remembering, thus affecting our actions. The research showed that listening to stories affects our brain in a similar fashion. Watching films, however, has no such effect.

4 Meditation and Brain Changes

The word “meditation” is derived from Latin *meditatio* – “thinking over” or “reflecting” and from a passive verb *meditari* – “to be moved to the middle” or “to descend to the center”. Although, there are many different forms of meditation their common feature is focusing attention to experience the present moment in other than just analytical manner. This entails a shift of automated thinking processes that leads to a greater control over the emotional dimension.

Meditative reading, just as meditation itself, positively affects the way in which humans experience life. Neuroscientists found out that the meditation process reinforces the changes that occur in our brain, when properly applied. A wave of meditation research started during the 1960s. Initially, the researches involved observing EEG recordings during meditation. However, the findings presented by various groups of researchers often differed. The significant change in the meditation research came with the use of modern methods of functional magnetic resonance imaging (fMRI) or positron emission tomography (PET). Researchers use these scanning techniques to uncover what is happening in a human brain during meditation (Burian 2010, 231).

There are many schools and styles of meditation, but their positive effects are very similar. From the neural network perspective, the researches demonstrate certain “disconnection” of attention from the outside world, which is manifested by heightened activity in most cerebral cortical regions towards the stable and steady brain function. The brain of a long-term meditator shows a different activity of the same cortical regions in comparison to people who do not meditate. Surely, meditation requires some effort that brings about changes in brain structure. Comparisons of long-term meditators and non-meditators showed a higher volume of grey matter in the areas that control heart activity and breathing bringing about positive changes in cognitive functions, emotionality and immune system. The correlation between duration of meditation practice and cortical thickness was determined in two specific areas (Koukolík 2012, 185–186).

Other studies have shown that the brain of people who practiced meditation showed more intense activity in the prefrontal cortex and, on the other hand, decreased amygdala activity, in comparison to ordinary people. Moreover, it has been proven that the great meditation masters were able to suppress their fight-or-flight response, i.e. the elementary physiological response to loud noises or other stimuli meditating by the amygdala (Stossel 2014, 55–56). Meditation also led to decrease in the amygdala density (Desborders *et al.*

2012). It means that meditation has a positive effect on emotional regulations and on control of response to stimuli.

Another research showed strong negative correlation between the activity of prefrontal cortex and the right amygdala only in participants high in mindfulness. The ability of prefrontal cortex to regulate emotional centers, the amygdala in particular, has been the focus of research for quite some time. The present findings suggest that the mechanism enabling mindfulness to deal better with difficult situations evoking negative emotions is indeed the enhanced ability of prefrontal cortex to regulate emotional centers (Creswell *et al.* 2007).

This study has also been confirmed by researchers from Boston University. For eight weeks, they were investigating two groups of people; one of which comprised adults with no prior meditation training. The findings suggested that meditation can have measurable effects on the amygdala response, and it can alter this response even if not practiced regularly (Desborders *et al.* 2012, 292).

It is well documented that the amygdala is an integrative center for basic emotions that could save the person’s life in the “fight-or-flight” response. On the other hand, these emotions can cause a major problem in the person’s life and relationships if they are not under conscious control. Obviously, we can hardly control the automatic system of our brain by willpower only. By working on the way in which we respond to the stimuli we can change the effect they have on us, and even use them to our advantage. This can be achieved through meditation, as suggested by Jonathan Haidt (Haidt 2006, 32). Surely, a certain form of behavioral regulation is also motivated by the social environment. However, it becomes apparent that meditative type of prayer has much greater impact.

Jan Burian says that although the research into meditation from the neurological perspective is still in its infancy, we can highlight the significance of that research with the following points. First, this research contributes to better comprehension of the neural foundations for focused and mindful attention and coping with emotions. Secondly, we can learn about the extent to which neuroplasticity enables the systematic development of these complex abilities. These research findings serve as empirical grounds for the explanation of neuronal mechanisms that are used in psychotherapeutic techniques utilizing the elements of meditative practice. Neuroscientific and therapeutic evidence of effec-

tiveness of meditation (Stenger 2014) could be instrumental in spreading the value of meditation practices in our culture (Burian 2010, 233–234).

When assessing positive effects of meditation, we should distinguish between meditation as such and implementing elements of meditation in psychotherapy. What we have here, says Jan Benda, are the qualitatively different goals, different areas of application, different attitudes to experienced phenomena and different tools. Meditation is not about solving relationship or family problems. Psychotherapy, on the other hand, does not rid a person of all psychological shackles (Benda 2010, 224).

5 Positive Effect of Meditation and Contemplative Reading on the Development of Personal Spirituality

With all that said, we can conclude that meditation training gives us an opportunity to escape from the stress of everyday life which we no longer experience as stress during meditation. This leads us to inner liberation from the stress that is often associated with exaggerated worries about our future. The practice of meditation affects the fear center in our brain and thus reduces stress. It helps to improve our physical and mental wellbeing.

Through meditation, we can induce the alterations of consciousness and that can positively affect our responses to questions about the meaning of life. Meditation helps us understand the more profound context of our own life, or identity and freedom. For a person of faith, meditation can deepen and strengthen his or her personal relationship with God (Smékal 2017, 37) [3].

D'Aquili and Newberg conducted a research involving a group of Franciscan nuns whose meditation focused on phrases from the Scripture or prayers. Their observations revealed that such meditation can lead to spiritual or mystical experiences that inevitably leads to an experience of God or Buddhist emptiness. Other experiences involved feeling of union or fulfilment (D'Aquili 2004, 44–47).

Effects of meditation described by neuroscience research are specifically different from that of contemplative reading, which involves cognitive functions and work with a text serving as a basis for active meditation. When slow, contemplative reading overlaps with what occurs during the learning process, we can presuppose changes in the brain in terms of its neural plasticity. Reading slowly and repeatedly (Jamison 2006, 64) saves the text into our memory. If contemplative reading is coupled with attentiveness or memorizing of some passage, certain transformation occurs and can also have a therapeutic value. Neurotheology of neuropsychology of religion [4] is concerned with application of neuroscience research findings to the realm of spirituality.

From a psychological perspective, reading sacred texts and employing imagination immerses the reader in the story on both intellectual and emotional levels. One may be confronted with more painful feelings, but these feelings are transformed into the positive ones during the contemplative reading exercise. For instance, anxiety-evoked experiences or memories are replaced by a Psalm prayer that is based on the trustful awareness of God's joyful presence in the present moment of our lives. As if the recalled negative memory is replayed under the unbiased supervision of loving and merciful God. Experiencing God's love releases tension and brings a new perspective into the present situation that can even provoke positive emotions such as joy. The memory remains, but it becomes neutral in its nature. It does no longer tie the person down. On the contrary, it gives one the strength to carry on with one's life (Sládek and Kopecký 2017, 99).

These positives overlap with the goals that theology aspires to reach. This is why meditative and contemplative prayer has become an indispensable part of Christian spirituality. The same can be said about the practice of *Lectio Divina*. When we feel restless and tired or when our mind is scattered, slow reading and pondering upon what has captured our attention can bring us back to concentration and being attentive in a prayer. By doing so, we become more conscious of God's presence in every place. When thinking about methodology, *Lectio Divina* is a relatively flexible exercise. With that in mind, we can speak of disposition of someone to engage in this practice, rather than just a technique. This practice of prayerful reading differs taking into account the personality of an individual, his/her needs and thinking methods as well as the time of the day. The Benedictine tra-

dition recommends practicing Lectio Divina in the morning. As we have already mentioned, Saint Benedict recommended dedicating three hours a day to this reading. Nowadays, many modern Benedictines find it difficult to keep to this schedule given the other tasks and duties they have to perform. In general, there is a rule in the modern practice of *lectio* and that is to engage in the contemplative reading regularly, for at least half an hour and build a foundation to more profound immersion into the prayer (Stewart 1998, 39–40).

Regular repetition of some activity plays a crucial role and affects physiological changes in the brain morphology [5]. It can be argued that the same occurs during Lectio Divina.

Lectio Divina can thus be perceived as the means that help us understand who we really are and what kind of people we could become. Through this practice, we are able to deepen our understanding of the Self, our inner processes, life itself and situations in which we currently find ourselves. The hectic times of today bring a mass production of the information content and thus reduce reading to scanning, skimming and skipping. Lectio Divina is the opposite of this trend. It leads a practitioner into the deeper concentration and that is the lasting value that can sure be assigned to this ancient practice.

The person of faith “does not read” to gain knowledge but to unite two minds (one’s own with that of God). When one feels this union, they stop to read and let the passage of the text speak to them. For this is the purpose of Lectio Divina, not the reading itself and this distinguishes it from learning (Vácha and Satoria 2013, 74).

From the theological perspective, the practice of contemplative reading enlivens our desire for God and helps us replace our distorted images of God rooted in stereotypes and paradigms of the given social environment. Lectio Divina has the power to deepen the sense of being free from the pressures of the community that has the tendency to maintain the status quo when it should be moving forward. Through the practice of meditation and contemplative reading, many monks and other people throughout Christian history gained concentration that was manifested in their maturity. Meditation and contemplative reading help overcome heteronomous moral attitudes and lead to autonomous morality. That is why this form of prayer is still desirable and beneficial even today.

6 Conclusion

We can conclude that meditation and Lectio Divina have a positive effect in the believer’s life not only on the spiritual level. These practices affect the person’s biological nature that is linked to the processes in the brain itself. Surely, in terms of our spirituality, the biological and neurological changes are not as significant as what we truly experience from the vantage point of faith. Measurable effects of spiritual activity clearly confirm that something is happening in the brain on the level of cognitive functioning. Needless to say, these researches do not explain whether the subject of faith – the supernatural reality – is indeed real. What the findings of neuroscience research in terms of positive effects of reading and meditation do confirm, is that what our ancestors discovered intuitively, just by observing their own life and experiences, were indeed great spiritual tools that help us improve focus and concentration, cope with difficult life situations and find answers to existential questions about the meaning of life.

The research also shows that spiritual experience involves both physical and mental processes. In this context, the findings of neurosciences and neurotheology (confirming the positive effects of spiritual activity) are a great contribution to practice of Christian spirituality. We, of course, do not claim that these studies explain meditative or contemplative prayer in terms of its content. After all, this is not the aim of such research. Rather, they help to understand the spiritual activity (in our instance, what is happening during meditation or Lectio Divina) also from the naturalistic perspective that can contribute to a discussion about the relationship between human nature and spirituality. The spiritual practice of Lectio Divina can also be instrumental in coping with the challenges of our time. It is also a reminder that working with text and information using the “scanning method” only does not yield the desired effect.

Notes

- [1] Let us mention, for instance, books of Eckhart Tolle, in particular his bestseller *The Power of Now*. Tolle's meditation method does not involve any object in comparison to the Christian forms of meditation, including *Lectio Divina*, which are based on the concrete content from the Scripture. A non-object form of meditation can also be found in Christian spirituality in the West (e.g. in *The Cloud of Unknowing* or books of John of the Cross). These meditations, however, have a different goal and methodology according to which some specific non-object form is revealed in the higher level of contemplation.
- [2] In order to clarify these terms, we would like to distinguish between reflection, meditation and contemplation in Christian spirituality based on activity of our mind. *Reflection* or *pondering* (discursive contemplation) involves our mind working on some text or stimulus. The person works actively with the purpose to discover the benefit of a certain idea for his/her life. *Meditation* is a passive activity characterized by concentration and attention with the purpose of (a) "emptying" our mind, or (b) letting the idea that has "caught our attention" to work on us (e.g. a passage or a word from the Scripture). *Contemplation* (silent contemplation) is the highest level of a passive prayer (that can stem from meditation) without the person working on some stimulus. It is about remaining in the presence of God without being occupied with any thoughts. The thoughts can even be disruptive. It is a state of some inner stillness and silence in the presence of God, who is always present. Given this clarification, we can refer to *Lectio Divina* as to an active form of prayer or *contemplative reading*. It can sometimes be referred to as *active meditation*.
- [3] In terms of psychology of religion and spirituality, it is worth drawing attention to experience from the practice of many Christians that is known in spirituality as "the dark night" (mostly associated with the Spanish mystic and theologian John of the Cross). It is a negative experience manifested in an inability to meditate or reach out to God. It is not the kind of aridity that is commonly experienced by those who engage in contemplative prayer and meditation. In terms of Christian spirituality, however, aridity is a specific stage of spiritual life (Říčan 2007, 101).
- [4] *Neuropsychology* is a subcategory of neurosciences that draws on neurological and psychological research of the brain and describes the connection between the brain and behavior, and between psychological and neurophysiological phenomena in the norm and pathology (Kulišťák 2003, 30).
- Neurotheology* is a branch of neuroscience that seeks to understand religious experience and behavior from the perspective of neuroscience. According to Newberg, neurotheology seeks to understand the relationship between the brain and theology and more broadly between the mind and religion without giving preference to either one of the disciplines (Newberg 2010, 1).
- [5] There was an interesting experiment involving London taxi drivers who had to memorize a great deal of information about the city's landscape. The study showed that this daily activity affected changes in the brain morphology, particularly those related to memory. In this context, it can be assumed that regular practice of *Lectio Divina* has similar effects and leads to changes in the brain (Green 2015, 26).

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